

IN THE CLAIMS

Please amend the claims as follows:

1-27. (Canceled)

28. (Previously Presented) An X-ray computed tomographic system, comprising:

- a first X-ray computed tomography apparatus;
- a second X-ray computed tomography apparatus; and
- a data managing system connected to said first and second X-ray computed tomography apparatuses via a network,

wherein said first X-ray computed tomography apparatus includes

- an X-ray irradiating unit configured to irradiate an X-ray to a subject while rotating about the subject;
- an X-ray detecting unit having a plurality of detecting element arrays aligned in a slice direction, in each of which a plurality of detecting elements, each generating electrical charges based on an incident X-ray, are aligned in a channel direction;
- a data acquisition unit, having a plurality of data acquisition element arrays, configured to read out the electrical charges from said plurality of detecting elements by using a certain number of data acquisition element arrays among said plurality of data acquisition element arrays and to generate raw data or projection data based on the electrical charges; and
- a first transmission unit configured to transmit, via said network to said data managing system, said raw data or projection data and appended information including the number of data acquisition element arrays used when reading out the electrical charges,

said data managing system includes

a first reception unit configured to receive said raw data or projection data and said appended information;

a storage unit configured to store said raw data or projection data and said appended information received;

a determining unit configured to determine, based on said appended information, whether image reconstruction by using one of said raw data and said projection data is possible in said second X-ray computed tomography apparatus; and

a second transmission unit configured to transmit one of said raw data and said projection data, and said appended information to said second X-ray computed tomography apparatus when said determining unit determines that reconstruction is possible, and

said second X-ray computed tomography apparatus includes

a second reception unit configured to receive said raw data or projection data and said appended information; and

a reconstruction unit configured to perform image reconstruction based on said raw data or projection data and said appended information received.

29. (Previously Presented) The X-ray computed tomographic system according to claim 28, wherein said reconstruction unit chooses, based on the number of arrays used, one of a first reconstruction method that does not concern an influence of a cone angle of an X-ray irradiated from said X-ray irradiating unit and a second reconstruction method that concerns the influence of the cone angle of the X-ray, and performs image reconstruction using the reconstruction method chosen.

30. (Previously Presented) The X-ray computed tomographic system according to claim 28, wherein said reconstruction unit chooses said first reconstruction method when 4 is

given as said certain number, and said second reconstruction method when one of 8 and 16 is given as said certain number.

31. (Previously Presented) The X-ray computed tomographic system according to claim 28, wherein said data managing system further includes a backup data generating unit configured to generate backup data in a certain storage unit, based on said raw data or projection data and said appended information.

32. (Currently Amended) The X-ray computed tomographic system according to claim 31, wherein:

said data managing system further includes a table generating unit configured to generate a table that correlates said ~~photographing~~ raw data or projection data and said appended information with the storage unit in which said backup data has been generated; and

said storage unit stores said table.

33. (Canceled).

34. (Currently Amended) A data managing system connected to a first X-ray computed tomography apparatus and a second X-ray computed tomography apparatus via a network, said data managing system comprising:

a reception unit configured to receive, from said first X-ray computed tomography apparatus, one of raw data and projection data obtained in said first X-ray computed tomography apparatus and appended information including the number of data acquisition element arrays used when obtaining one of said raw data and said projection data;

a storage unit configured to store one of said raw data and said projection data, and said appended information received;

a determining unit configured to determine, based on said appended information, whether image reconstruction based on one of said raw data and said projection data is possible in said second X-ray computed tomography apparatus; and

a transmission unit configured to transmit ~~transmits~~ one of said raw data and said projection data, and said appended information to said second X-ray computed tomography apparatus when said determining unit determines that reconstruction is possible.

35. (Previously Presented) The data managing system according to claim 34, further comprising a backup data generating unit to generate backup data in a certain storage unit, based on said raw data or said projection data and said appended information.

36. (Previously Presented) The data managing system according to claim 34, further comprising:

a data processing unit configured to process one of said raw data and said projection data to generate and display a reconstruction image in said second X-ray computed tomography apparatus when said determining unit determines that the reconstruction is impossible,

wherein said transmission unit transmits said appended information and the reconstruction image to said second X-ray computed tomography apparatus when said determining unit determines that reconstruction is impossible.

37. (Previously Presented) The data managing system according to claim 34, further comprising:

a table generating unit configured to generate a table that correlates one of said raw data and said projection data, and said appended information with the storage unit in which said backup data has been generated,
wherein said storage unit stores said table.

38. (Previously Presented) An X-ray computed tomography apparatus connected, via a network, to a data managing system, said apparatus comprising:

a reception unit configured to receive, from said data managing system, one of raw data and projection data obtained in an X-ray computed tomography apparatus, and appended information including the number of data acquisition element arrays used when obtaining one of said raw data and said projection data;

a reconstruction unit configured to perform image reconstruction based on one of said raw data and said projection data, and said appended information received; and

a determining unit configured to determine whether one of said raw data and said projection data transmitted from said data managing system is reconstructible in said reconstruction unit;

wherein said reception unit receives one of said raw data and said projection data, and said appended information only when said determining unit determines that reconstruction is possible.

39. (Previously Presented) The X-ray computed tomography apparatus according to claim 38, wherein said reconstruction unit chooses, based on the number of arrays used, one of a first reconstruction method that does not concern an influence of a cone angle of an X-

ray irradiated from said X-ray irradiating unit and a second reconstruction method that concerns the influence of the cone angle of the X-ray, and performs image reconstruction using the reconstruction method chosen.

40. (Previously Presented) The X-ray computed tomography apparatus according to claim 38, wherein said reconstruction unit chooses said first reconstruction method when 4 is given as the number of data acquisition element arrays used, and said second reconstruction method when one of 8 and 16 is given as said certain number.

41. (New) An X-ray computed tomographic system, comprising:
an X-ray computed tomography apparatus; and
a data managing system connected to said X-ray computed tomography apparatuses via a network, wherein said X-ray computed tomography apparatus includes
an X-ray irradiating unit configured to irradiate an X-ray to a subject while rotating about the subject;

an X-ray detecting unit having a plurality of detecting element arrays aligned in a slice direction, in each of which a plurality of detecting elements, each generating electrical charges based on an incident X-ray, are aligned in a channel direction;

a data acquisition unit, having a plurality of data acquisition element arrays, configured to read out the electrical charges from said plurality of detecting elements by using a certain number of data acquisition element arrays among said plurality of data acquisition element arrays and to generate raw data or projection data based on the electrical charges;

a first transmission unit configured to transmit, via said network to said data managing system, said raw data or projection data and appended information including the number of data acquisition element arrays used when reading out the electrical charges;

a first reception unit configured to receive said raw data or projection data and said appended information; and

a reconstruction unit configured to perform image reconstruction based on said raw data or projection data and said appended information received, and

said data managing system includes

a second reception unit configured to receive said raw data or projection data and said appended information;

a storage unit configured to store said raw data or projection data and said appended information received;

a determining unit configured to determine, based on said appended information, whether image reconstruction by using one of said raw data and said projection data is possible in said X-ray computed tomography apparatus; and

a second transmission unit configured to transmit one of said raw data and said projection data, and said appended information to said X-ray computed tomography apparatus when said determining unit determines that reconstruction is possible.